

## Remarks

It is noted that that the Examiner has rejected inter alia independent claims 1 and 8 over newly cited references to Hardwick and Bakke.

Claim 1 has been recited to include the at least one route server which computes the forwarding rules for the forwarders, which are responsible for forwarding, not routing (Page 7, lines 21-22). As noted in the passage bridging pages 26 -27, by separating the routing functions from the forwarding functions, considerable efficiencies can be achieved in the system and the route servers, which have knowledge about the topology of the whole system, need not be in a data path.

Contrary the position taken by the Examiner, in the applicant's respectful submission the passage quoted by the Examiner at col. 16, lines 51 to 57 of Hardwick does not disclose forwarding rules. The quoted passage discloses the desirability of each group defining their own policy for accepting traffic without indicating how this result is achieved. As discussed in the previous response, monitoring access is not the same as creating forwarding rules, which determine how packets are sent over the network. The passage at col. 17, lines 1 to 7 explains that the access is controlled by placing filters on the virtual links. A filter selectively blocks packets to control access. It does not determine routing.

The Examiner agrees that Hardwick fails to disclose selecting a forwarding rule based on source address in the packets and information in the selected rule, but alleges that this feature is shown in Bakke, and in particular refers to the passage at col. 11, lines 1 to 40. However, in the embodiment described in this passage, Bakke extracts the routing information from the source address. According to the invention as claimed, the source address is used to select the forwarding rule, which is computed by the route server, and the forwarding is then effected based on the destination address and the selected forwarding rule. Unlike Bakke, the

forwarding information is not found in the source address, but is computed independently by the route server (which has knowledge of the network topology). Thus, contrary to the Examiner's position, the applicants would respectfully submit that Bakker does not disclose the allegedly missing element from claim 1.

Moreover, the Examiner is required to give a rationale for making the combination that he alleges, wrongly in the applicant's respectful submission, falls within the rejected claim.

According to the Examiner, the rationale is to "reduce transit delay". In order for a motivation to be effective, there has to be some known problem associated with the prior art, or in this case suggestion that transit delay is a problem in Hardwick that needs to be addressed. The applicants can find no indication in Hardwick that there is a problem associated with transit delay, neither can they find any rational reason why incorporating the teachings of Bakke into Hardwick (and it is by no means clear to the applicants what would result from such a combination of disparate teachings) would result in improved transit delay.

The forwarding decision made by Hakke is a forwarding type decision (see col. 11, line 15), not a decision as to which output service interface to forward the packets to. The "type decision" is governed by the route that the packet is to take as determined by the source route information in the source address. Once the route has been determined, the forwarder needs to know whether the packet should be sent to its destination by bridging or routing etc. This decision does not affect the service interface. It just affects the manner in which the packet is forwarded. Bridging occurs at layer 2 of the OSI model (data link layer), whereas routing occurs at layer 3 (network layer), and which type of forwarding is applied depends on the networks. In the applicant's respectful submission, Bakke at least fails to teach making a decision as to which output service interface to forward the packets to based on a destination

address and information in the selected forwarding rule as more particularly set forth in claim 1.

Also, in Bakke the forward type decision is not based on source address *per se*. The source address is validated, but there is no teaching that the forward type decision is based on source address. On the contrary, the forward type decision is based on the route information, which is not the same as the source address.

Similar reasoning applies to claim 8, which is directed to an entity, but which includes similar limitations to those discussed above.

Since a combination of Hardwick and Bakke fails to disclose the method and apparatus claimed, the applicants respectfully submit that the application is in condition for allowance.

Allowance and reconsideration are therefore earnestly solicited.

Respectfully submitted,



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